CHAPTER 2

BATTLE COMMAND AND TROOP-LEADING PROCEDURES

Battle command is the exercise of command in operations against a hostile, thinking enemy. It uses the leadership element of combat power to assimilate thousands of bits of information to visualize the operation, describe it in terms of intent, and direct the military actions of subordinates to achieve victory. Thinking and acting are simultaneous activities for infantry leaders in battle. Battle command covers the knowledge, techniques, and procedures necessary to control operations and to motivate soldiers and their organizations into action to accomplish assigned missions. As part of battle command, commanders visualize the current state of the battlefield as well as future states at different points in the operation; they then formulate concepts of operations that allow their units to progress from one state to the other at the least cost. Other elements of battle command include assigning missions, prioritizing and allocating resources, selecting the critical times and places to act, and knowing how and when to make adjustments during the fight.

SECTION I. COMMAND AND CONTROL

Command and control is the exercise of authority and direction by a properly designated commander over assigned or attached forces in the accomplishment of the mission.

2-1. COMMAND AND CONTROL

Command and control are two dependent concepts that have distinct meanings rather than one word or system.

a. **Command.** Command is the art of assigning missions, prioritizing resources, guiding and directing subordinates, and focusing the unit's energy to accomplish clear objectives. The commander’s will to win, morale, and physical presence must be felt by those he leads. Leading soldiers and units to successfully accomplish the mission remains a command imperative; safeguarding soldiers is an inherent responsibility of command.

b. **Control.** Control is the science of defining limits, computing requirements, allocating resources, monitoring performance, and directing subordinate actions to accomplish the commander’s intent.

c. **The Command and Control System.** The command and control (C2) system within an infantry rifle company is the arrangement of personnel, information management, procedures, and equipment and facilities essential to plan, prepare for, execute, and assess operations. The C2 system must be reliable, responsive, and durable. It must withstand crises, even the loss of the leader, and still continue to function. Although it is the most complex system in the unit, C2 must result in clear, concise instructions that focus the entire unit toward the objective.

2-2. CONCEPT OF COMMAND AND CONTROL

Historically, military commanders have employed variations of the two basic command and control concepts: detailed command and mission command.

a. **Detailed Command.** Detailed command centralizes information and decision-making authority. Orders and plans are detailed and explicit and successful execution depends on strict obedience by subordinates with minimal decision-making or initiative on their part. Detailed command emphasizes vertical, linear information flow where information flows up the chain of command and orders flow down.

b. **Mission Command.** Mission command concentrates on the objective of an operation and not on how to achieve that objective. It is the conduct of military operations through decentralized execution based on mission orders for effective mission accomplishment. Successful mission command results from subordinate leaders at all echelons exercising disciplined initiative within the commander's intent to accomplish missions. It requires an environment of trust and mutual understanding. Today's operational environment emphasizes the need for rapid decision-making and execution to include rapid response to changing situations. It stresses trust and mutual understanding among superiors and subordinates. Mission command accepts the uncertainty of war by reducing the need for complete certainty in order to act. Because mission command decentralizes decision making authority and grants subordinates significant freedom of action, it demands a leader who is thoroughly versed in Army doctrine and who is disciplined, informed, innovative, dynamic, audacious, confident, and competent.

2-3. LEADERSHIP

Leadership is the critical element of both the C2 system (personnel) and combat power. Through leadership, the commander inspires and directs his unit to complete demanding tasks in difficult situations. In addition, the following factors are essential to the company commander's ability to lead his company on the battlefield.

a. **Will.** Often the victor in battle is the unit that refuses to lose. Competent leaders and tough, realistic training are the keys to developing this determination. The leader must develop a "will to win" in his soldiers and his unit.

b. **Trust.** The leader must earn the trust of his soldiers. They must have confidence in his abilities. The leader also must trust his soldiers and develop a climate that allows subordinates to make decisions.

c. **Delegation.** After ensuring his subordinates are well trained, the leader must delegate the proper authority and freedoms to his men. He focuses his time and energy on what he determines as critical and delegates the remainder to his subordinates.

d. **Discipline.** The leader instills discipline in his soldiers. Discipline ensures that proper standards are maintained in the absence of leader supervision. The decentralized operations conducted by infantry companies require self-discipline of every soldier in the unit.

2-4. FUNDAMENTALS OF COMMAND AND CONTROL

The following fundamentals describe methods of directing military operations that encourage and expect subordinates to take action consistent with the intent and concept of higher headquarters.

a. **Expect Uncertainty.** The leader must understand the environment of combat; the battle will be dynamic and non-linear. Communications will be degraded, and the chaos of battle will often prevent the commander from knowing what is happening beyond his own senses. The situation during planning will always change before execution.

b. **Reduce Leader Intervention.** Plan and direct operations to require the absolute minimum intervention during execution. When soldiers expect the leader to make the decision or initiate the action, they are reluctant to take action. When precise control is required for synchronization, such as an on-order task, the leader should also provide the subordinate the criteria for making the decision. Leaders must realize that some loss of precision is better than inactivity.

c. **Increase Subordinate Planning Time.** The commander ensures the effective use of all available planning time. Although the majority of the planning takes place at the battalion and company level, the infantry rifle platoons and squads require extra time to conduct their rehearsals and inspections. A unit SOP is a key tool for using time well.

d. **Give Subordinates Maximum Freedom of Action.** Given the expected battlefield conditions, leaders at every level avoid placing unnecessary limits on their soldiers' freedom of action. The leader at the point of decision must have the knowledge, the training, and the freedom to make the correct decision that supports the commander's intent.

e. **Lead Well Forward.** The leader locates where he can best fight his unit, and he considers a number of factors in determining this location. His leadership is most effective face-to-face when he can see the situation and his soldiers can see him. Since he cannot be everywhere, he focuses on the decisive action that will accomplish his mission. He normally locates with his main effort (the subordinate unit assigned the decisive action) to provide his leadership and to be in a position to shift or re-task the main effort.

2-5. COMMAND AND CONTROL RESPONSIBILITIES

Infantry rifle company commanders train and maintain their units to conduct sustained operations. All leaders must ensure that their soldiers are tactically and technically proficient in the weapons systems found in the unit.

a. **Company Commander.** The commander employs command and control to ensure the company accomplishes its missions. He is also responsible for the tactical employment, training, administration, personnel management, and sustainment of his company. He must know the capabilities of his men and weapons systems and how to tactically employ them. The commander exercises command through his subordinate leaders. In an airborne and air assault battalion or an SBCT, he serves as an advisor to the higher commander concerning employment of all assets.

b. **Company Executive Officer.** The XO is the second in command of the company. He assists the company commander control the fires and movement of the rifle platoons. The XO frees the company commander of all distractions to allow the company commander to control the company’s most critical actions. (For example, the XO submits situation reports to the higher headquarters main command post, relays information to the company commander such as enemy and friendly situational updates, and communicates with adjacent units.) During preparation for combat operations, the XO serves as the company’s primary CSS planner and makes the necessary coordination with the higher headquarters, and he provides the company first sergeant with the CSS plan for execution. During execution, the XO may be designated as an element leader. Typically, he will control the company’s 60-mm mortar section and the antiarmor section. He may also control a supporting element consisting of a rifle platoon and other elements (for example, all of the company’s machine guns).

c. **Company First Sergeant.** The first sergeant is the senior NCO in the company and is normally the most experienced soldier in the company. He advises the company commander on tactical employment, and he is the expert on individual and NCO skills. He assists the company commander to plan, coordinate, and supervise all activities that support the mission. During execution, the 1SG is the primary CSS executor. He may also control elements or subordinate units during designated missions.

d. **Mortar Section Leader.** The mortar section leader is responsible for training and maintaining the company's 60-mm mortar section. He ensures that the company has effective fire support from the mortar section. He also assists the commander in planning the employment of the mortar section, coordinates with the company FIST, and controls the section during tactical operations.

e. **Rifle Platoon Leader.** The rifle platoon leader is responsible for training, maintaining, and tactically employing the platoon. His responsibilities include planning, coordinating, and integrating the platoon's fires to fit the supported unit's tactical plan. He knows the abilities of his weapons systems and is skilled in their use. The platoon leader must also be proficient in calling for and adjusting indirect fires. He employs his platoon tactically based on orders from the commander.

f. **Rifle Platoon Sergeant.** The platoon sergeant is normally the most experienced soldier in the platoon. He leads the elements of the platoon as directed by the platoon leader; he assumes responsibility of the platoon in the platoon leader's absence. The PSG is responsible for individual training, advising the platoon leader on tactical employment of the platoon's weapons systems, and helping to control the platoon during combat operations. He supervises equipment maintenance, supply, and casualty evacuation.

g. **Weapons Squad Leader.** The weapons squad leader is responsible for the discipline and training of his two machine gun teams and for the maintenance of his squad's equipment. During operations, he selects the location of primary, alternate, and supplementary firing positions. He controls the squad's fires and movement, and he ensures mutual support is achieved with other elements of the platoon with which he is operating. He may assume the responsibilities of the platoon sergeant in his absence.

h. **Rifle Squad Leader.** The squad leader is responsible for the discipline and training of his squad and the maintenance of his equipment. He is skilled in all aspects of his weapons systems. He employs his squad in accordance with (IAW) orders from the platoon leader. He detects and identifies targets, issues fire commands, and controls the fires and movement of his squad.

2-6. COMBAT ORDERS

Combat orders focus on what tasks must be accomplished without dictating in detail how they will be done. Whenever possible, they are oral orders issued face-to-face on the ground where the fight will take place.

a. **Brevity and Clarity.** Combat orders require well-trained subordinates who understand their commanders' intent and concepts (two levels higher). Combat orders address only the required information. They avoid unnecessary detail and redundancy and do not restate doctrine or SOPs.

b. **Tailoring.** The leader determines exactly what he wants his units to accomplish and clearly communicates these requirements to them. If one of his subordinates has not displayed the tactical competence to operate with a combat order, then the order must be

tailored based on the training, experience, and capability of the subordinate leader receiving the order.

(1) This tailoring may include nothing more than providing additional instructions, establishing more restrictive control measures, or directing a specific use for one of his organic assets.

(2) A commander may detail exactly how a platoon leader will employ his entire platoon, clearly state the limits for using his initiative, and collocate himself or the company XO with this platoon. This should be only a short-term solution; leaders must be trained to meet their responsibilities.

SECTION II. TROOP-LEADING PROCEDURES

Troop-leading procedures (TLP) are a sequence of actions that enable the company commander to use available time effectively and efficiently in the planning, preparing, executing, and assessing of combat missions. Collectively, the TLP are a tool to assist leaders in making, issuing, and supervising operation orders. The TLP are integrally coupled with the military decision-making process (MDMP) (see Appendix D, TLP-MDMP Integration). Digitization has enhanced, not changed, the SBCT infantry company commander's TLP. The tactical internet provides continually updated information from intelligence sources both internal and external to the SBCT. It transmits information from satellites, sensors, UAVs, and human intelligence (HUMINT) sources to the company commander for incorporation into his plan. This cycle of collection provides faster, more detailed information than previously available. Additionally, combat information provided by the RSTA squadron and battalion's reconnaissance platoon minimizes, but does not replace, the traditional assumptions and templates. The company commander must be knowledgeable of these resources and must plan operations to maximize the communications that make access to this information possible. Beyond the communications, the need to apply both known and templated enemies in planning processes is paramount.

2-7. APPLICATION OF TROOP-LEADING PROCEDURES

The following discussion of troop-leading procedures (Figure 2-1) assumes that the company commander will plan in a time-constrained environment. As such, the suggested techniques are oriented to help him quickly develop and issue a combat order.

RECEIVE THE MISSION
ISSUE A WARNING ORDER
MAKE A TENTATIVE PLAN
INITIATE MOVEMENT
CONDUCT RECONNAISSANCE
COMPLETE THE PLAN
ISSUE THE OPERATIONS ORDER
SUPERVISE AND REFINE

Figure 2-1. Troop-leading procedures.

a. Troop-leading procedures are consistent with the MDMP described in FM 5-0 (FM 101-5). The two are not identical, however, because specific steps of the MDMP are designed and intended to help coordinate staff and commander responsibilities of units with staffs. While the company commander has subordinate leaders who assist him with aspects of planning for operations, these leaders are not staff officers. This fact places the burden of planning on the shoulders of the company commander. The TLP reflect this reality while incorporating the spirit, language, and general process of the MDMP to assist in the preparation of OPORDs.

b. The TLP are not a hard and fast set of rules. Rather, they provide a guide that the company commander applies in ways that are consistent with the situation, his experience, and the experience of his subordinate leaders. The tasks involved in some steps (such as issue the warning order, initiate movement, and conduct reconnaissance) may recur several times. The last step, the activities of supervising and refining the plan, occur throughout the TLP. The following outline of the TLP assumes that the company commander will plan in a time-constrained environment. The suggested techniques can help him quickly develop and issue a combat order. The higher headquarters may issue two warning orders before the company commander begins his TLP.

(1) IAW FM 5-0 (101-5), the warning order will address the following elements at a minimum: type of operation, general location of operation, any reconnaissance to initiate, any movement to initiate, and an initial time line. The higher headquarters may issue additional information in the first warning order (for example, products from current staff or commander estimates). The leader will conduct his initial planning-time analysis, which allows him to determine the total amount of time to plan and prepare. This initial planning-time analysis is the basis for the detailed time analysis that will be conducted as planning continues. He analyzes the time his unit has available and prepares an initial time line. He should plan to use no more than one-third of the available planning time, thus leaving his subordinates with two-thirds of the available time. An effective technique to manage the available time is for the leader to issue his operations order in approximately one-fifth of the available planning time. This provides additional time for rehearsals without cutting into subordinate planning time. He should take into account ambient light effects when planning his time line.

(2) The company commander may issue a warning order immediately following the higher headquarters' initial warning order. He addresses the same elements of the higher headquarters' initial warning order in his initial warning order. The most important element of this warning order is his initial planning time line. He also may pass on any other instructions or information that he thinks will assist his subordinates in preparing for the upcoming mission. The company commander may distribute this warning order through the tactical internet, or he may brief his warning order from the actual terrain, terrain model, sketch, or map. If practical, he assembles his subordinate leaders to receive the warning order face-to-face from the actual terrain. If not practical, he may use a terrain model, sketch, or map. By quickly issuing his warning order the leader enables his subordinates to begin their own preparations while he develops the remaining warning orders and the OPORD. Warning orders, though not as detailed as an operations order, should follow the same five-paragraph format, providing as much information as possible with an initial time line.

(3) The second warning order from the higher headquarters consists of the essential information derived from mission analysis and the higher commander's guidance. It includes mission analysis results:

- Analysis of terrain.
- Enemy forces (paragraph 1a of the higher headquarters' OPORD to include the enemy situational template [SITEMP]).
- Higher headquarters' restated mission statement.
- Higher commander's intent.
- Area of operations (AO), area of influence, and area of interest.
- Commander's critical information requirements (CCIR).
- Risk guidance.
- Reconnaissance to initiate.
- Security measures.
- Deception guidance.
- Mobility/counter-mobility guidance.
- Specific priorities.
- Time line.
- Guidance on rehearsals.

The higher headquarters may issue additional information in the second warning order (for example, friendly forces, paragraph 1b of the OPORD). The commander must understand the information given in higher headquarters' second warning order. He can conduct an assessment but will not complete a detailed analysis until he receives the mission. Depending on the situation, he may choose to issue an initial warning order to his subordinates following receipt of the higher headquarters' second warning order.

(4) The company commander may determine that he needs to issue a second warning order after receiving the higher headquarters' second warning order or after receiving other pertinent information. Since he does very little analysis with information received in the higher headquarters' second warning order, and depending on his situation, he may not issue the second company warning order. He may choose instead to issue this information after receiving the higher headquarters' third warning order.

2-8. RECEIVE THE MISSION

As the title indicates, this step addresses the actions a company commander takes as he receives his mission. "Receiving" the mission may occur in one of several ways. It may begin with the receipt of a warning order from the higher headquarters, or it may not begin until he actually receives the higher headquarters' OPORD (which would be the case if the higher headquarters did not use warning orders prior to issuing the OPORD). In the most challenging situation, it may come about as a result of a change in the overall situation during execution. Besides receiving (or deducing) his mission during the first step of the TLP, the company commander must also assess the time he has available to prepare for and execute the mission. As a result of his time assessment, he prepares an initial time line for planning and execution.

a. **Mission Analysis.** Although the focus of the first step of the TLP is on determining the unit mission and assessing the time available to accomplish the mission, this step also begins an activity called *mission analysis.* The company commander will not receive his mission until the higher headquarters produces its third warning order or

the OPORD. For him, mission analysis is not as detailed as it is in the higher headquarters' MDMP. His mission analysis is essentially an analysis of METT-TC considerations. He does this in as much depth as time and quality of information allows. Analyzing the factors of METT-TC is a continuous process. He constantly receives information from the time that he begins planning through execution. During execution, his continuous analysis enables him to issue well-developed fragmentary orders. He must assess if the new information affects his mission and his plan. If it does, he then must decide how to adjust his plan to meet this new situation. He does not need to analyze the factors of METT-TC in any set order or sequence. How and when he analyzes each factor depends on when information is made available to him and his own experience and preference. One technique is to parallel the TLP based on the products received from the higher headquarters' MDMP. Using this technique, he analyzes *mission* first, *terrain and weather, enemy*, *troops and support available*, *time available,* and finally *civil considerations*. This is not a hard and fast set of rules. Different elements of information that come into the unit must be analyzed and assessed.

(1) ***Mission.*** Leaders at every echelon must have a clear understanding of the mission, intent, and concept of the operation of the commanders one and two levels higher. This understanding makes it possible to exercise disciplined initiative. The company commander captures his understanding of what his unit is to accomplish in his restated mission statement. He takes six steps to write his restated unit mission statement. These steps include analyzing the higher headquarters' (*two levels up*) mission, intent and concept; the immediate higher headquarters' (*one level up*) mission, intent, and concept; identifying specified, implied, and essential tasks, and any constraints.

(a) *Higher Headquarters (two levels up) Mission, Intent, and Concept.* The company commander understands this higher headquarters' concept of the operation. He identifies this headquarters' task and purpose and how his immediate higher headquarters is contributing to the fight. He also must understand the commander's intent (*two levels up*).

(b) *Immediate Higher Headquarters (one level up) Mission, Intent, and Concept.* The company commander understands the immediate headquarters' concept of the operation. He identifies this headquarters' task and purpose as well as his contribution to this fight. The company commander must clearly understand the commander's intent from the OPORD (*one level up*). Additionally, he identifies the task, purpose, and disposition for all adjacent maneuver elements underneath this headquarters' control.

(c) *Unit Mission*. The company commander finds his unit's mission in the concept of the operation paragraph in the immediate higher headquarters' OPORD. The purpose of the main effort unit usually matches or achieves the purpose of the immediate higher headquarters. Similarly, supporting effort units' purposes must relate directly to the main effort unit accomplishing its purpose. The company commander must understand how his unit relates to the purposes of the other units. Finally, he determines his unit's mission essential tactical task. The unit must accomplish this task in order to accomplish the assigned purpose. He must understand why the commander (*one level up*) assigned his unit the particular tactical task and determine how it fits into the immediate higher headquarters' concept of the operation.

(d) *Constraints.* Constraints placed on the leader by a higher command to dictate an action or inaction restricts the freedom of action the subordinate leader has for planning by stating the things that he must or must not do. The company commander identifies all

constraints the OPORD places on the unit's ability to execute its mission. There are two types of constraints: proscriptive (requirements for action) and prohibitive (requirements for inaction).

(e) *Identify Tasks*. The company commander must identify and understand the tasks required to accomplish a given mission. There are three different types of tasks: specified, implied, and essential.

- Specified Tasks. Tasks specifically assigned to a unit by a higher headquarters. Paragraphs 2 and 3 of a higher headquarters' order or plan state specified tasks. Specified tasks may also be found in annexes and digital overlays (for example, "seize OBJ FOX," "reconnoiter route BLUE," "assist the forward passage of B company," "send two soldiers to assist in the loading of ammunition").
- Implied Tasks. Tasks that must be performed to accomplish a specified task but are not stated in a higher headquarters' order. Implied tasks are derived from a detailed analysis of the higher headquarters' order, the enemy situation and courses of action, and the terrain. Analysis of the unit's current location in relation to future areas of operation as well as the doctrinal requirements for each specified task might provide implied tasks. Only those tasks that require allocation of resources should be retained.
- Essential Tasks. These tasks are important for the success of the unit. They are derived from a review of the specified and implied tasks. An essential task that must be executed to accomplish the assigned purpose is the mission essential task.

(f) *Restated Mission Statement*. The leader prepares his restated mission statement expressed around the five W's: *who*, *what*, *when*, *where*, and *why*. The "*who"* is the company and or platoon; the "*what"* is the unit's mission essential task. The "*when"* is given in the higher headquarters' OPORD; the "*where"* is the objective or location taken from the higher headquarters' OPORD; and the "*why"* is the company and or platoon purpose taken from the higher headquarters' concept of the operation. An example of a company restated mission statement follows:

> **EXAMPLE:** B Company attacks to seize OBJ FOX (NB123456) not later than (NLT) 010200 October __ in order to prevent enemy forces from counterattacking into the battalion's main effort.

(2) ***Terrain and Weather.*** If the higher headquarters has developed a modified combined obstacle overlay (MCOO) and shared it via the TI, the company commander can quickly accomplish his analysis of the terrain. From the MCOO he will already have an appreciation for the general nature of the ground and the effects of weather. However, he must conduct his own detailed analysis to determine how terrain and weather will uniquely affect his unit's mission and the enemy. He must go beyond merely passing along the MCOO to his subordinate leaders and making a general observation of the terrain (for example, this is high ground). He must arrive at significant conclusions about how the terrain and weather will affect the enemy and the unit. Most importantly, the

company commander will apply these conclusions when he develops courses of action for both enemy forces and his unit.

(a) *Classifying Terrain Mobility*. Terrain mobility is classified in one of four categories: unrestricted, restricted, severely restricted, and complex.

- Unrestricted. This terrain is free of any restrictions to movement; no actions are required to enhance mobility. This type of terrain generally allows wide maneuver and offers unlimited travel over well-developed road networks.
- Restricted. This terrain hinders movement to some degree. Little effort is needed to enhance mobility, but units may need to detour frequently. They may have difficulty maintaining optimum speed, moving in some types of combat formations, or transitioning from one formation to another.
- Severely restricted. This terrain severely hinders or slows movement in combat formations unless some effort is made to enhance mobility. It may require commitment of engineer forces to improve mobility, or it may require deviation from doctrinal formations and or deviation from doctrinal rates of march.
- Complex. Complex terrain includes two or more of the traditional classifications of terrain. For example, complex terrain may have an area of forest that is restricted along with an urban area that is severely restricted and rolling plains that are unrestricted.

(b) *Prioritizing Terrain Analysis.* Limited available planning time may force the company commander to prioritize his terrain analysis. For example, in the conduct of an attack, a company commander may prioritize the area immediately around the objective for analysis, followed by the company's specific axis leading to the objective. Given more time, he may then analyze the remainder of his company's area of operation, area of influence, and area of interest.

(c) *Using Visual Aids.* The company commander prepares some sort of visual aid to depict and explain the results of his analysis for his subordinates so they can understand his conclusions about the effects that the terrain and weather will have on the mission. This visual aid could be a digital overlay sent to the subordinate leaders via the tactical internet, a hand-drawn overlay for a map sheet, or a terrain model. Whatever the chosen method, he must include graphical depictions of terrain mobility classification, key terrain, inter-visibility (IV) lines, known obstacles, and avenues of approach and mobility corridors.

(d) *Using OAKOC.* The military aspects of terrain (OAKOC), Figure 2-2, are used to analyze the ground. The sequence used to analyze the military aspects of terrain can vary. The leader may prefer to determine *Obstacles* first, *Avenues of Approach* second, *Key Terrain* third, *Observation and Fields of Fire* fourth, and *Cover and Concealment* last. For each aspect of terrain, the company commander determines its effect on both friendly and enemy forces. These effects translate directly into conclusions that can be applied to either friendly or enemy courses of action. One technique to analyze terrain is to use a matrix. See Figure 2-3 (Analysis of Terrain Matrix).

OAKOC
OBSERVATION AND FIELDS OF FIRE **A**VENUES OF APPROACH **K**EY TERRAIN **O**BSTACLES **C**OVER AND CONCEALMENT

Figure 2-2. Military aspects of terrain.

		Effects	Conclusions
Obstacles		Friendly	
		Enemy	
Avenues of Approach		Friendly	
		Enemy	
Key Terrain #1	Observation	Friendly	
		Enemy	
	Fields of Fire	Friendly	
		Enemy	
	Cover	Friendly	
		Enemy	
	Concealment	Friendly	
		Enemy	

Figure 2-3. Analysis of terrain matrix.

(e) *Obstacles*. The company commander first identifies existing and reinforcing obstacles in his area of operation that limit mobility with regards to the mission. Existing obstacles include, but are not limited to, the following:

- Ravines.
- Gaps and ditches over 3 meters wide.
- Tree stumps and large rocks over 18 inches high.
- Forests with trees 8 inches or more in diameter with less than 4 meters between trees.
- Man-made existing obstacles (for example, buildings or power and telephone lines).

Reinforcing obstacles include, but are not limited to, the following:

- Minefields (conventional and situational).
- Antitank ditches.
- Wire obstacles.

Figure 2-4, page 2-12, lists several offensive and defensive considerations the infantry rifle company commander can include in his analysis of obstacles and restricted terrain.

OFFENSIVE CONSIDERATIONS

- HOW IS THE ENEMY USING OBSTACLES AND RESTRICTED TERRAIN FEATURES?
- WHAT IS THE COMPOSITION OF THE ENEMY'S REINFORCING OBSTACLES?
- HOW WILL OBSTACLES AND TERRAIN AFFECT MY MOVEMENT AND OR MANEUVER?
- IF NECESSARY, HOW CAN THE COMPANY AVOID SUCH FEATURES?
- HOW DO WE DETECT AND, IF DESIRED, BYPASS THE OBSTACLES?
- WHERE HAS THE ENEMY POSITIONED WEAPONS TO COVER THE OBSTACLES, AND WHAT TYPE OF WEAPONS IS HE USING?
- IF I MUST SUPPORT A BREACH, WHERE IS THE EXPECTED BREACH SITE AND FROM WHERE WILL THE ENEMY OVERWATCH THE OBSTACLE?
- HOW WILL THE TERRAIN AFFECT THE EMPLOYMENT OF MORTARS, MACHINE GUNS, AND JAVELIN MISSILES?

DEFENSIVE CONSIDERATIONS

- WHERE DOES THE ENEMY WANT TO GO? WHERE CAN I KILL THE ENEMY? HOW DO I GET HIM TO GO THERE?
- HOW WILL EXISTING OBSTACLES AND RESTRICTED TERRAIN AFFECT THE ENEMY?
- HOW CAN I USE THESE FEATURES TO FORCE THE ENEMY INTO MY ENGAGEMENT AREA, DENY HIM AN AVENUE, OR DISRUPT HIS MOVEMENT?
- HOW WILL THE TERRAIN AFFECT THE EMPLOYMENT OF MORTARS, MACHINE GUNS, AND JAVELIN MISSILES?

Figure 2-4. Considerations in analysis of obstacles and restricted terrain.

(f) *Avenues of Approach*. An avenue of approach is an air or ground route of an attacking force leading to an objective or key terrain. Avenues of approach are classified by type (mounted, dismounted, air, or subterranean), formation, and speed of the largest unit that can travel along it. First, the company commander must identify mobility corridors, if not provided by the higher headquarters. Mobility corridors are areas where a force can move in a doctrinal formation at a doctrinal rate of march. They are classified by type and size of force and formation employed. Two examples are--

- A motorized rifle platoon (MRP) moving in column (MRP-Column).
- An enemy squad (SQD) moving in a wedge (dismounted SQD–Wedge)

The company commander groups mutually supporting mobility corridors to form an avenue of approach. If mutually supporting mobility corridors do not exist, then a single mobility corridor may become an avenue of approach. Avenues of approach are classified in the same manner as a mobility corridor. After identifying these avenues of approach, he must evaluate each one and reach a conclusion on their importance to the situation. Figure 2-5 lists several offensive and defensive considerations that the infantry rifle company commander can include in his evaluation of avenues of approach.

OFFENSIVE CONSIDERATIONS

- HOW CAN I USE EACH AVENUE OF APPROACH TO SUPPORT MY MOVEMENT AND MANEUVER?
- HOW WILL EACH AVENUE SUPPORT MOVEMENT TECHNIQUES, FORMATIONS, AND (ONCE WE MAKE ENEMY CONTACT) MANEUVER?
- WILL VARIATIONS IN TRAFFICABILITY FORCE CHANGES IN FORMATIONS OR MOVEMENT TECHNIQUES OR REQUIRE CLEARANCE OF RESTRICTED TERRAIN?
- WHAT ARE THE ADVANTAGES AND DISADVANTAGES OF EACH AVENUE?
- WHAT ARE THE ENEMY'S LIKELY CONUNTERATTACK ROUTES?
- WHAT LATERAL ROUTES COULD WE USE TO SHIFT TO OTHER AXES, AND WHICH ONES COULD THE ENEMY USE TO THREATEN OUR FLANKS?
- HOW WILL EACH AVENUE OF APPROACH AFFECT THE RATE OF MOVEMENT OF EACH TYPE OF FORCE?

DEFENSIVE CONSIDERATIONS

- WHAT ARE ALL LIKELY ENEMY AVENUES INTO MY SECTOR?
- HOW CAN THE ENEMY USE EACH AVENUE OF APPROACH?
- WHAT LATERAL ROUTES COULD THE ENEMY USE TO THREATEN OUR FLANKS?
- WHAT AVENUES WOULD SUPPORT A FRIENDLY COUNTERATTACK OR REPOSITIONING OF FORCES?

Figure 2-5. Considerations in avenue of approach analysis.

(g) *Key Terrain*. The company commander must identify key terrain. Key terrain is any location or area of which the seizure, retention, or control affords a marked advantage to either combatant. It is a conclusion rather than an observation: a prominent hilltop overlooking an avenue of approach, for example, may or may not be key terrain. Even if the hill offers clear observation and fields of fire, it is of no marked advantage to the unit that controls it if the opposition can easily bypass it on another avenue of approach. On the other hand, if the hilltop affords cover and concealment, observation, and good fields of fire on multiple avenues of approach, or is the only avenue of approach in the area, the terrain offers a definite advantage to whoever controls it. The commander must assess what terrain is essential to his mission accomplishment. An example of key terrain for an infantry rifle company in the attack could be a tree line that overlooks the enemy's reverse slope defense. Controlling this area may be critical in establishing a support-by-fire position to protect a breach force. The commander also must determine if any ground is *decisive terrain*. This is key terrain for which the seizure, retention, or control is necessary for mission accomplishment. Decisive terrain is not present in every situation. By determining that terrain is decisive, he recognizes that seizing or retaining it is an absolute requirement for successful accomplishment of the mission. Figure 2-6, page 2-14, lists several considerations that can be included in his analysis of key terrain.

TACTICAL CONSIDERATIONS

- WHAT TERRAIN IS IMPORTANT FOR FRIENDLY OBSERVATION, BOTH FOR COMMAND AND CONTROL AND FOR CALLING FOR FIRES?
- WHAT TERRAIN IS IMPORTANT TO THE ENEMY AND WHY? IS IT IMPORTANT TO ME?
- WHAT TERRAIN HAS THE HIGHER HEADQUARTERS DETERMINED TO BE KEY TERRAIN? IS THIS TERRAIN IMPORTANT TO THE ENEMY?
- IS THE ENEMY CONTROLLING THIS KEY TERRAIN? AM I CONTROLLING THIS KEY TERRAIN?
- HOW DO I GAIN OR MAINTAIN CONTROL OF KEY TERRAIN?
- WHAT TERRAIN IS KEY FOR COMMUNICATIONS NODES THAT MAY DICTATE THE EMPLOYMENT OF DIGITAL COMMUNICATIONS EQUIPMENT?

Figure 2-6. Considerations in key terrain analysis.

(h) *Observation and Fields of Fire*. The company commander must identify locations along each avenue of approach that provide clear observation and fields of fire for both the attacker and the defender. He analyzes the area surrounding key terrain, objectives, engagement areas, and obstacles. He locates IV lines (terrain that inhibits observation from one point to another) and assesses the ability of the attacking force to overwatch or support movement (with direct fire). In analyzing fields of fire, he focuses on both the friendly and enemy potential to cover terrain (especially avenues of approach and key terrain) with direct fires. Additionally, he must identify positions that enable artillery observers to call indirect fire. Whenever possible, he conducts a reconnaissance of the ground from both enemy and friendly perspectives. He might conduct this reconnaissance personally, by map, or with his subordinate units, or he can use the assets and information provided by the RSTA squadron or battalion reconnaissance platoon. This reconnaissance helps him to see the ground in a more objective manner and to see how the ground affects both enemy and friendly forces (Figure 2-7).

OFFENSIVE CONSIDERATIONS

- ARE CLEAR OBSERVATION AND FIELDS OF FIRE AVAILABLE ON OR NEAR THE OBJECTIVE FOR ENEMY OBSERVERS AND WEAPON SYSTEMS?
- WHERE CAN THE ENEMY CONCENTRATE FIRES?
- WHERE WILL THE ENEMY BE UNABLE TO CONCENTRATE FIRES?
- WHERE IS THE ENEMY VULNERABLE?
- WHERE CAN I SUPPORT THE MOVEMENT OF A FRIENDLY FORCE WITH MORTAR, MACHINE GUN, OR JAVELIN?
- WHERE CAN FRIENDLY FORCES CONDUCT SUPPORT-BY-FIRE OR ATTACK-BY-FIRE?
- WHERE ARE THE NATURAL TRPS?
- WHERE DO I POSITION INDIRECT FIRE OBSERVERS?

DEFENSIVE CONSIDERATIONS

- WHAT LOCATIONS AFFORD CLEAR OBSERVATION AND FIELDS OF FIRE ALONG ENEMY AVENUES OF APPROACH?
- WHERE WILL THE ENEMY ESTABLISH FIRING LINES OR SUPPORT-BY-FIRE POSITIONS?
- WHERE WILL I BE UNABLE TO MASS FIRES?
- WHERE IS THE DEAD SPACE IN MY SECTOR? WHERE AM I VULNERABLE?
- WHERE ARE THE NATURAL TRPS?
- WHERE CAN I DESTROY THE ENEMY? CAN I OBSERVE AND FIRE ON THAT LOCATION WITH AT LEAST 2/3 OF MY COMBAT POWER?
- HOW OBVIOUS ARE THESE POSITIONS TO THE ENEMY?
- WHERE DO I POSITION INDIRECT FIRE OBSERVERS?

Figure 2-7. Considerations in analysis of observation and fields of fire.

(i) *Cover and Concealment*. The company commander looks at the terrain, foliage, structures, and other features along avenues of approach and on objectives or key terrain to identify sites that offer cover (protection from the effects of direct and indirect fire) and concealment (protection from observation). In the defense, weapon positions must be both lethal and survivable, and effective cover and concealment is just as vital as clear fields of fire (Figure 2-8).

OFFENSIVE CONSIDERATIONS

- WHAT AXES AFFORD BOTH CLEAR FIELDS OF FIRE AND EFFECTIVE COVER AND CONCEALMENT?
- WHICH TERRAIN PROVIDES BOUNDING ELEMENTS WITH COVER AND CONCEALMENT WHILE FACILITATING LETHALITY?

DEFENSIVE CONSIDERATIONS

- WHAT LOCATIONS AFFORD EFFECTIVE COVER AND CONCEALMENT AS WELL AS GOOD OBSERVATION AND FIELDS OF FIRE?
- HOW CAN FRIENDLY AND ENEMY FORCES USE THE AVAILABLE COVER AND CONCEALMENT?

Figure 2-8. Considerations in analysis of cover and concealment.

(j) *Weather Analysis*. There are five military aspects of weather: visibility, winds, precipitation, cloud cover, and temperature/humidity. Consideration of the effects of

weather is an essential part of the company commander's mission analysis. The commander must go beyond merely making observations; he must arrive at significant conclusions about how the weather will affect the visibility, mobility, and survivability of his company and the enemy. The company commander reviews the conclusions from his higher commander and identifies his own critical conclusions about the five military aspects of weather. He must apply the results of his analysis when he develops friendly and enemy courses of action.

(k) *Visibility*. The company commander identifies critical conclusions about visibility factors (such as light data, fog, and smog) and battlefield obscurants (such as smoke and dust). The commander considers light data and identifies critical conclusions about beginning morning nautical twilight (BMNT), sunrise (SR), sunset (SS), end of evening nautical twilight (EENT), moonrise (MR), moonset (MS) and percentage of illumination. Some additional visibility considerations include:

- Will the sun rise behind my attack? Will I attack toward the sunrise?
- How can I take advantage of the limited illumination?
- How will this affect friendly and enemy target acquisition?
- Will the current weather favor the use of smoke to obscure during breaching?
- Will fog affect friendly and enemy target acquisition?

(l) *Winds*. The company commander identifies critical conclusions about wind factors (such as direction and speed) Some wind considerations are:

- Will wind speed cause smoke to dissipate quickly?
- Will wind speed and direction favor enemy use of smoke?
- Will wind speed and direction affect the employment of 60mm mortars?

(m) *Precipitation*. The company commander identifies critical conclusions about precipitation factors (such as type, amount, and duration). Some precipitation considerations are:

- How will precipitation affect the mobility of the company?
- How can precipitation add to the company achieving surprise?

(n) *Cloud Cover*. The company commander identifies critical conclusions about cloud cover (such as limits on illumination and solar heating of targets).

- How will cloud cover affect company operations at night? How will it affect the enemy?
- How will cloud cover affect the target acquisition of the CLU?

(o) *Temperature and Humidity*. The company commander identifies critical conclusions about temperature factors (such as high and low temperatures and infrared crossover times) and battlefield factors (such as use of smoke or chemicals). Some temperature considerations are:

- How will temperature (hot or cold) and humidity affect the rate of march for the company?
- How will temperature (hot or cold) and humidity affect the soldiers and equipment?
- Will temperatures and humidity favor the use of nonpersistent chemicals?

(3) ***Enemy.*** Analyzing the enemy consists of seven steps: doctrinal analysis, composition, disposition, strength, capabilities, company level enemy SITEMP, and initial company priority intelligence requirements (PIR). The critical outcome of analyzing the enemy is for the company commander to identify the enemy's weaknesses

so that he might exploit them by applying overwhelming combat power to achieve his purpose. He must know how the enemy will fight and the ground where the fight will occur. The company commander must understand what is actually known of the enemy and what is merely templated. Without this appreciation, it is possible to develop an erroneous plan that is based solely on assumptions and therefore not a reliable prediction of what will occur. The company commander must understand the assumptions the battalion S2 used to portray the enemy's courses of action. Furthermore, his own assumptions about the enemy must be consistent with those of his higher commander.

NOTE: In analyzing the enemy, the company commander must understand the intelligence preparation of the battlefield (IPB). Although he does not prepare IPB products for his subordinates, he must be able to use the products of the higher headquarters' IPB effectively

(a) *Doctrinal Analysis (How the Enemy Will Fight)*. It is not enough simply to know the number and types of vehicles, soldiers, and weapons the enemy has. The company commander must thoroughly understand when, where, and how the enemy prefers or tends to use the assets he possesses. A doctrinal template is a visual illustration of how the enemy force might look and act without the effects of weather and terrain. He looks at specific enemy actions during a given operation (such as defense out of contact, security zone defense, or movement to contact) and uses the appropriate doctrinal template to gain insights into how the enemy may fight. Likewise, he must understand enemy doctrinal objectives. In doctrinal terms, he asks: Is the enemy oriented on the terrain (for example, a forward detachment), on his own force (such as an advance guard), or on friendly forces (as in a security zone)? What effect will this have on the way the enemy fights? As the global situation changes, however, the possibility increases of fighting adversaries with no structured doctrine. Therefore, the process of templating the enemy would be somewhat limited. In such a situation, a company commander must rely on information provided by RSTA squadron and battalion reconnaissance platoon assets. He also may make sound assumptions about the enemy, human nature, and local culture.

(b) *Composition*. His analysis must determine the types of vehicles, soldiers, and equipment the enemy could use against his unit. From the enemy forces paragraph (1a), the intelligence annex of the higher headquarters' OPORD, or through information provided via the common operational picture (COP), he identifies the task and purpose of the enemy elements.

(c) *Disposition*. He determines how the enemy is (or might be) arrayed from higher headquarters' information. Next, he determines the enemy's form of maneuver or defensive technique. If available, he determines from what echelon force the enemy comes. He determines the disposition for the next two higher enemy elements.

(d) *Strength*. He identifies the enemy's strength by unit. He can obtain this information by translating percentages given from higher headquarters to the actual numbers in each enemy element or from information provided by the COP.

(e) *Capabilities*. Based on the S2's assessment and the enemy's doctrine and current location, the company commander must determine the enemy's capabilities. This also includes studying the maximum effective range for each weapon system, doctrinal rates of march, and associated time lines to perform certain tasks. One technique is to use the

BOS as a checklist to address every significant element the enemy brings to the fight. The company commander also determines the capabilities of the next higher enemy element. These capabilities should include reasonable assets the next higher element, or other higher enemy headquarters, may provide. This should include, but is not limited to, employment of reserves, use of chemical weapons, artillery and or mortar locations and ranges, and employment of reconnaissance assets.

(f) *Enemy SITEMP*. To identify how the enemy will potentially fight, the company commander weighs the result of his analysis of terrain and weather against the higher headquarters' SITEMP. The refined product is a company SITEMP, a visual/graphic depiction of how he believes the enemy will fight under specific battlefield conditions. This SITEMP is portrayed one echelon lower than that developed by the higher headquarters' S2. For example, if a battalion SITEMP identifies a motorized rifle platoon (MRP) on the company's objective, the company commander, using his knowledge of both the enemy's doctrine and the terrain, develops a SITEMP that positions individual vehicles from the MRP and possibly individual fighting positions or trenches in the platoon's defense. He includes in this SITEMP the likely sectors of fire of the enemy's weapons and any tactical and protective obstacles, either identified or merely templated, which support the defense. Figure 2-9 depicts recommended SITEMP items. It is important to remember that the company commander must not develop his SITEMP independently of the higher commander's guidance and the S2's product. The product must reflect the results of reconnaissance and shared information. Differences between the SITEMPs must be resolved before the company commander may continue with his analysis of the enemy. Finally, given the scale with which the company commander often develops his SITEMP, a 1:50,000 map, it is advisable to transfer the SITEMP to a large-scale sketch for briefing purposes when the situation allows. This is not for analysis, but to enable subordinates to see the details of the anticipated enemy course of action (COA). Once he briefs the enemy analysis to his subordinates, he must ensure they understand what is known, what is suspected, and what is merely templated (estimated). Unless given the benefit of reconnaissance or other intelligence, his SITEMP is only an "estimate" of how the enemy may dispose itself. He must not take these as facts. Reconnaissance is critical in developing the best possible enemy scenario.

DEFENSE	OFFENSE
PRIMARY/ALTERNATE/SUBSEQUENT POSITIONS	ATTACK FORMATIONS
ENGAGEMENT AREAS	AXES OF ADVANCE
INDIVIDUAL VEHICLES	FIRING LINES
CREW-SERVED WEAPONS	OBJECTIVES
TACTICAL AND PROTECTIVE OBSTACLES	RESERVE FORCE COMMITMENT
TRENCHES	PLANNED INDIRECT FIRE TARGETS
PLANNNED INDIRECT FIRE TARGETS	SITUATIONAL OBSTACLES
OBSERVATION POSTS	RECONNAISSANCE OBJECTIVES
COMMAND AND CONTROL POSITIONS	RECONNAISSANCE FORCE ROUTES
FPF AND FPL	PHASE LINES
LOCATION OF RESERVES	PLANNNED POINT OF PENETRATION
ROUTES FOR RESERVE COMMITMENT	
TRAVEL TIME FOR RESERVE COMMITMENT	
BATTLE POSITIONS/STRONGPOINTS/SECTORS	
SECTORS OF FIRE	

Figure 2-9. Recommended SITEMP items.

(g) *Initial Priority Intelligence Requirements.* The company commander will develop his initial PIR. PIR are defined as information about the enemy that will lead to a critical decision by a commander. Answering the PIR will allow the commander to clarify the enemy situation. Although the company commander's PIR will help clarify the enemy situation for him, they usually lead to answering the battalion commander's PIR.

(4) ***Troops and Support Available.*** Perhaps the most critical aspect of mission analysis is determining the combat potential of one's own force. The company commander must realistically and unemotionally determine all available resources and any new limitations based on level of training or recent fighting. This includes troops who are either attached to or in direct support of his unit. He must know the status of his soldiers' morale, their experience and training, and the strengths and weaknesses of subordinate leaders. The assessment includes knowing the strength and status of his soldiers and their equipment. It also includes understanding the full array of assets that are in support of the unit. He must know, for example, how much indirect fire, by type, is available and when it will become available.

(5) ***Time Available.*** As addressed in the first step of the TLP, time analysis is a critical aspect to planning, preparation, and execution. The company commander must not only appreciate how much time is available. He must also be able to appreciate the time-space aspects of preparing, moving, fighting, and sustaining. He must be able to see his own tasks and enemy actions in relation to time. For example, he must be able to assess the impact of limited visibility conditions on the troop-leading procedures. He must know how long it takes under such conditions to prepare for certain tasks--such as order preparation, rehearsals, and backbriefs--and to complete other time-sensitive preparations for subordinate elements. He must understand how long it takes to deploy a support-by-fire element and determine the amount of ammunition that is needed to sustain the support for a specific period of time. He must know how long it takes to assemble a bangalore torpedo and to breach a wire obstacle. Most importantly, as events occur he must adjust his appreciation of time available to him and assess its impact on what he wants to accomplish. Finally, he must update previous time lines for his

subordinates, listing all events that affect the company and its subordinate elements. Figure 2-10 provides an example of a company time line.

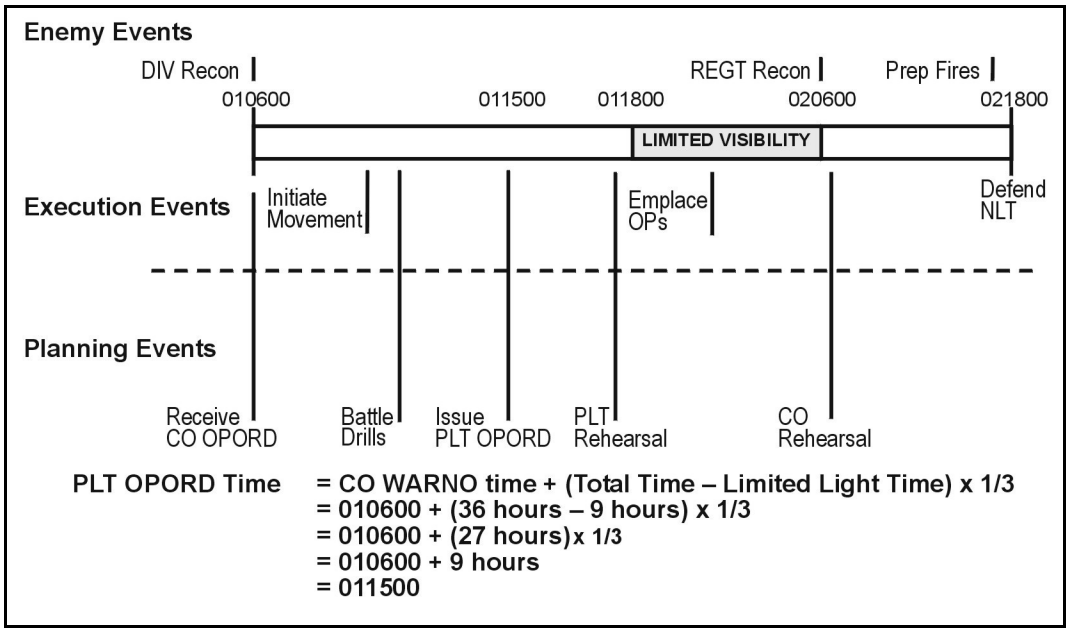

Figure 2-10. Example of a company time line.

(6) ***Civil Considerations.*** The higher headquarters will provide the company commander with civil considerations that may affect the battalion's mission. The company commander must also identify any civil consideration that may affect only his mission. These may include refugee movement, humanitarian assistance requirements, or specific requirements related to the rules of engagement (ROE) or rules of interaction (ROI).

(7) ***Summary of Mission Analysis.*** The end result of mission analysis is the development of a number of insights and conclusions regarding how the factors of METT-TC affect accomplishment of the unit's mission. From these insights and conclusions, the company commander derives a restated mission, an initial intent, an initial risk assessment, and possibly a decisive point. He uses these to develop courses of action, which are possible ways to accomplish his mission.

(a) *Commander's Intent*. The commander's intent is a clear, concise statement of what the force must do to succeed with respect to the enemy, terrain, and desired end state. It provides the link between the mission and the concept of operations by stating the key tasks that, along with the mission, are the basis for subordinates to exercise disciplined initiative when unanticipated opportunities arise or when the original concept of operation no longer applies. Key tasks are those that must be performed by the unit or conditions that must be met to achieve the stated purpose of the operation. Key tasks are not tied to a specific course of action. They are not limited to "tactical tasks." The operation's tempo, duration and effect on the enemy, and the terrain that must be controlled, are examples of key tasks. The commander's intent does not include the method by which the force will get from its current state to the end state. The method is the concept of operations. Nor does the intent contain "acceptable risk." Risk is addressed

in courses of action. Figure 2-11 shows an example of key tasks related to enemy, terrain, and desired end state. An example of commander's intent follows.

> **Commander's Intent**: *All enemy forces on OBJ ATLANTA destroyed; company controls west side of Bush Hill; company is in defensive posture NLT 011400 OCT __, able to defeat enemy CATK in EA RED; TF 2-99 IN (M) passed through CP2 without significant delay.*

KEY TASKS IN RELATION TO--		
Enemy: • All enemy forces on OBJ ATLANTA destroyed. • Enemy forces fixed in EA DOG. • Enemy reconnaissance forces destroyed prior to reaching PL DOG. • Enemy unable to mass greater than one MRP against the Company ME.	**Terrain**: • Company controls west side of Bush Hill NLT 010600OCT__. • Major chokepoints along RT BLUE cleared of obstacles and enemy forces. • Company reaches PL DOG NLT 010400OCT__.	**Desired End State**: • Company in defensive posture NLT 011400OCT__, able to destroy enemy counterattack in EA RED. TF 2-99 IN (M) passed through CP2 without significant delay.

Figure 2-11. Example of key tasks related to enemy, terrain, and desired end state.

(b) *Risk Assessment*. Risk assessment is the identification and assessment of hazards that allows a commander to implement measures to control hazards. (Refer to Appendix E for a detailed discussion of risk management and Appendix F for a discussion of fratricide avoidance.) Identification and assessment are the first two steps of the risk management process. Risk management is conducted to protect the force and increase the chance of mission accomplishment. The commander must consider two kinds of risk: tactical and accident. Tactical risk is associated with hazards that exist due to the presence of the enemy on the battlefield. The consequences of tactical risk take two major forms:

- Enemy action in an area where the leader has accepted risk (such as an enemy attack where the friendly commander has chosen to conduct an economy of force).
- Lost opportunity (such as moving across severely restricted terrain and then being unable to mass effects of combat power because of inability to traverse the terrain rapidly).

Accident risk includes all operational risk considerations other than tactical risk and can include activities associated with hazards concerning friendly personnel, equipment readiness, and environmental considerations. Fratricide and the inability to complete a planned air movement because of weather conditions are two examples of accident risk. The leader must identify risks based on the results of his mission analysis, decide which risks he is willing to accept, and incorporate measures that abolish or mitigate the consequences of the identified risks into his courses of action.

2-9. ISSUE A WARNING ORDER

After the company commander has determined his unit's mission and assessed the time available for planning, preparing for, and executing the mission, he should immediately issue a warning order to his subordinates. In addition to telling his subordinates of the company's new mission, the warning order also gives them his planning time line. He also may communicate any other instructions or information that he thinks will assist them in preparing for the new mission. This includes any information on the enemy and the nature of the higher headquarters' overall plan and any specific instructions or rehearsal tasks for preparing subordinate units for the mission. The most important thing is not to waste any time in issuing the initial warning order. If and when more information becomes available, he can--and should--issue additional warning orders. By issuing the initial warning order as quickly as possible, he enables his subordinates to begin their own planning and preparation (parallel planning) while he begins to develop the OPORD.

2-10. MAKE A TENTATIVE PLAN

In a time-constrained environment, a company commander typically will develop only one course of action; however, as time permits, he may develop as many courses of action as possible to allow comparison. He will begin this step of the TLP after he issues his warning order and after he has received higher headquarters' third warning order. He does not need to wait for a complete OPORD from the higher headquarters before beginning his own course of action development. The SBCT infantry company commander must take advantage of the tactical internet to communicate his COA through imagery, graphics, and relevant information.

a. **Course of Action Development.** The purpose of course of action development is to determine one or more ways to accomplish the mission that are consistent with the immediate higher commander's intent. A COA describes how the unit might generate the effects of overwhelming combat power against the enemy at the decisive place with the least friendly casualties. Each COA the company commander develops must be detailed enough to clearly describe how he envisions using all of his assets and combat multipliers to achieve the company's mission-essential task and purpose. To develop a COA, he focuses on the actions the company must take at the decisive point and works backward to his start point. He should develop several COAs if time permits. A legitimate COA must be--

- Suitable. If successfully executed, the COA will accomplish the mission consistent with the higher commander's concept and intent.
- Feasible. The unit has the technical and tactical skills and resources to successfully accomplish the COA.
- Acceptable. The COA minimizes friendly casualties.
- Distinguishable. Each COA must be sufficiently different from the others to justify full development and consideration.
- Complete. The COA must cover the operational factors of *who*, *what*, *when*, *where*, and *how* and address the mission from its start point to its conclusion.

The COA also must address the doctrinal aspects of the mission. For example, in an attack against a defending enemy, the COA must address the movement to, deployment against, assault of, and consolidation upon, the objective.

(1) ***Analyze Relative Combat Power.*** The purpose of this step is to compare combat power of friendly and enemy forces. It is not merely a calculation and comparison of friendly and enemy weapons numbers or units with the aim of gaining a numerical advantage. Using the results of all previous analyses done during mission analysis, the company commander compares his unit's combat power strengths and weaknesses with those of the enemy. He seeks to calculate the time and manner in which his force (and the enemy) can maximize the effects of maneuver, firepower, protection, leadership, and information in relation to the specific ground, disposition, and composition of each force. In short, he is trying to determine where, when, and how his unit's combat power (the effects of maneuver, firepower, protection, leadership, and information) can overwhelm the enemy's ability to generate combat power. Where and when this occurs is, of course, the decisive point. Using a relative combat power analysis (RCPA) matrix is a technique to assist in organizing his analysis (Figure 2-12). The matrix allows him to identify conclusions that he can apply to the development of his COA. The conclusions from his analysis of combat power are not COA specific, but rather apply to all COAs he may develop. Once he has completed his analysis of relative combat power, he attempts to determine a decisive point (if he has not done so already). He does this by considering the unit's mission, the terrain, and the enemy, seeking to find a place in time or space where he can focus overwhelming combat power to accomplish the unit's assigned purpose. He must understand the strengths and vulnerabilities of his unit and the enemy. The RCPA, as a tool, should lead him to a better understanding of when, where, and how to apply his combat power to exploit a weakness or relative weakness of the enemy. This process points the way to a potential decisive point, tactics, or techniques to be used when generating options.

Combat Power	Friendly Strengths	Enemy Weaknesses	Friendly Weaknesses	Enemy Strengths	Conclusions	Tactics Techniques
Maneuver						
Firepower						
Protection						
Leadership						
Information						

Figure 2-12. Relative combat power analysis (RCPA) matrix.

(2) ***Generate Options.*** The company commander first determines the doctrinal requirements for his particular operation. These also may include the doctrinal tasks to be assigned to subordinate units. For example, a breach requires an assault force, a support force, a breach force, and possibly a reserve. This doctrinal requirement provides a framework for the commander to develop a COA. Next he determines his decisive point. If he has not done so earlier in the TLP, he must determine his decisive point during this step in order to proceed. Once he has determined his decisive point, he identifies the main effort's purpose and the purposes of his supporting efforts. The main effort's purpose is nested to his unit's overall purpose and is achieved at his decisive point. The supporting efforts' purposes are nested to the main effort's purpose by setting the conditions for

success of the main effort. He then determines the mission-essential tactical tasks for the main and supporting efforts. These tasks are those that must be accomplished to achieve the subordinate units' given purposes.

(3) ***Array Initial Forces.*** He must then determine the specific quantity of weapons (by type) and fire support necessary to accomplish each task against the enemy array of forces. He must ensure that he has sufficient combat power to accomplish the assigned task. He allocates resources required for the main effort's success first and then determines the resources needed for supporting efforts in descending order of importance.

> **EXAMPLE**: The main effort in an attack of a strongpoint may require three rifle squads and an engineer squad to seize a foothold, whereas a support-by-fire force may require four squads and one MGS vehicle. This array relies on an accurate assessment in the relative combat power analysis (step 1).

(4) ***Develop Schemes of Maneuver.*** The scheme of maneuver is a description of how the company commander envisions the COA unfolding from its start to its conclusion or end state. He clarifies in his mind the best ways to use the available terrain and to employ the unit's strengths against the enemy's weaknesses. He includes the requirements of indirect fire to support the maneuver. He then develops the maneuver control measures necessary to convey his intent, to enhance the understanding of the schemes of maneuver, to prevent fratricide, and to clarify the tasks and purposes of the main and supporting efforts. He also determines the CS and CSS aspects of the COA. One technique is to overlay his scheme of maneuver onto the SITEMP digitally. As control measures become necessary, he places them on his maneuver overlay. This now becomes the basis for his COA sketch that he can distribute to his subordinates.

(5) ***Assign Headquarters.*** He assigns specific subordinate elements as the main and supporting efforts. He ensures that he has employed every unit in his command and every asset that has been attached and that he has provided for adequate command and control of each element. The company commander must avoid unnecessarily complicated command and control structures.

(6) ***Prepare COA Statements and Sketches.*** He bases the COA statement on the scheme of maneuver that he has already developed. The statement focuses on all significant actions from the start of the COA to its finish. His ability to prepare COA sketches and statements depends on the amount of time available as well as his skill and experience with weapons systems within the company. He should, whenever possible, prepare a sketch showing each COA (if more than one has been developed). Another useful technique is to show the time it takes to achieve each movement and task in the COA sketch to gain an appreciation for the relative accumulation of time as the course of action is executed. The COA statement should state his decisive point and why it is decisive, the form of maneuver or the defensive technique, the tasks and purposes of his main and supporting efforts, the task and purpose of critical BOS elements, and an end state.

b. **Course of Action Analysis.** After developing the COA, the commander analyzes it to determine its strengths and weaknesses; to visualize the flow of the battle; to identify the conditions or requirements necessary to enhance synchronization; and, most significantly, to gain insights into actions at the decisive point of the mission. If he has developed more than one COA, he applies this same analysis to each COA developed. He does this analysis through war-gaming or "fighting" the COA against at least one enemy COA.

(1) ***War-Gaming.*** When time permits, he war-games each friendly COA against the most probable enemy COA. War-gaming, depending on how much time is devoted to it, provides the following:

- An appreciation for the time, space, and triggers needed to integrate fire support, smoke, engineers, ADA, and NBC with maneuver platoons (infantry, antiarmor, or tank) to support unit tasks and purposes identified in the scheme of maneuver.
- Flexibility built into the plan by gaining insights into possible branches to the basic plan.
- The need for control measures (such as checkpoints, contact points, and target reference points [TRPs]) that facilitate control, flexibility, and synchronization.
- Coordinating instructions to enhance execution and unity of effort and to mitigate confusion between subordinate elements.
- Information needed to complete paragraphs 3, 4, and 5 of the OPORD.
- Assessments regarding on-order and be-prepared missions.
- Projected CSS expenditures, friendly casualties, and resulting medical requirements.

(2) ***War-Gaming Techniques.*** Depending on the time available and his personal preference, the company commander may use any of the following war-gaming techniques--

(a) *Box Technique*. The box technique focuses the war game on a specific area of the battlefield. This may be the objective area, the engagement area, or some other critical location where decisive or critical actions will take place. It should include all of the units, friendly and enemy, that will have a direct impact on those actions. This technique is a good one to use when time is limited and the enemy situation is relatively clear. However, a key disadvantage is that when considering only the actions at the critical or decisive points, the company commander may overlook other actions or events that could have a significant impact on the unit’s mission.

(b) *Belt Technique*. The belt technique allows him to divide the COA into events or belts. He may do this in several ways, such as from phase line to phase line or by significant event. Each step then is war-gamed in sequence. This approach is most effective for offensive COAs. The company commander can modify this technique by dividing the battlefield into belts that are not necessarily adjacent or overlapping but focus on the critical actions throughout the area of operations.

(c) *Avenue-in-Depth Technique*. This method is most effective for a defensive COA, especially when there are several avenues of approach to consider. Using the enemy's most probable COA, he analyzes friendly and enemy actions along one avenue of approach at a time.

(3) ***War-Gaming Guidelines.*** To gain the benefits that result from war-gaming a COA, the company commander must remain objective and record the results of the war game. He must remember the assumptions he made about the enemy, his unit, and the ground during the development of his tentative plan. He must avoid letting the enemy or his unit "win" to justify the COA. Additionally, he must avoid drawing premature conclusions about the war game or making changes to his COA until the war game is complete.

c. **Course of Action Comparison and Selection.** If the company commander has developed more than one COA, he must compare them by weighing the specific advantages, disadvantages, strengths, and weaknesses of each COA as noted during the war game. These attributes may pertain to the accomplishment of the unit purpose, the use of terrain, the destruction of the enemy, or any other aspect of the operation that he believes is important. He uses these factors, gained from his RCPA matrix, as his frame of reference in tentatively selecting the best COA. He makes the final selection of a COA based on his own judgment, the start time of the operation, the area of operations, the scheme of maneuver, and subordinate unit tasks and purposes.

d. **Commander's Critical Information Requirements.** The CCIR identify and filter information needed by a commander to support his visualization and to make critical decisions, especially to determine or validate courses of action. They help him determine what is relevant to mission accomplishment. In one technique, he writes the desired question, the quantified answer, and the reaction (critical decision to make). CCIR also help focus the efforts of his subordinates and assist in the allocation of resources. CCIR should be kept to what is absolutely essential.

(1) ***Priority Intelligence Requirements.*** PIR is information that a commander needs to know about terrain or enemy in order to make a critical decision. PIR are best expressed in a question that can be answered with a "Yes" or "No."

> **EXAMPLE**: Can enemy wheeled vehicles cross the creek at NU12345678? If yes, the company will reinforce the obstacle and establish an antiarmor ambush at this location. If no, the company will emplace an OP then establish the antiarmor ambush along another route.

(2) ***Friendly Forces Information Requirements (FFIR).*** This is information that a commander needs to know about his unit or adjacent units to make a critical decision.

> **EXAMPLE**: I want to know when we have lost one MGS because I will need to supplement the remaining direct fires of the support element with additional mortar fires.

2-11. INITIATE MOVEMENT

The company commander initiates any movement necessary to continue mission preparation or to posture the unit for the start of the mission. This step can be executed at

any time throughout the sequence of the TLP. This may include movement to an assembly area, a battle position, a new area of operation, or the movement of guides or quartering parties.

2-12. CONDUCT RECONNAISSANCE

In order to exploit the principles of speed and surprise, the company commander should weigh the advantage gained by personal reconnaissance versus the combat multiplier received in the form of supplied information via FBCB2. The commander may have the ability to plan his operation based upon the unprecedented amount of combat information provided by the RSTA squadron and by the other information collection sources. However, if time permits, he should verify higher headquarters' intelligence with visual reconnaissance. His reconnaissance should seek to confirm the PIR that support his tentative plan. These PIR are usually assumptions or critical facts concerning the enemy (his location, especially templated positions, and strength) and the terrain (verification, for example, that a tentative support-by-fire position actually will allow for suppression of the enemy or that an avenue of approach will be useable).

a. If possible, he should include his subordinate leaders in this reconnaissance. This allows them to see as much of the terrain and enemy as possible. The reconnaissance also helps subordinate leaders to gain insight into his visualization of the operation.

b. The leader's reconnaissance may include moving to or beyond the line of departure (LD) or walking from the forward edge of battle area (FEBA) back to and through the company area of operation or battle position along likely enemy avenues of approach. If possible, he should select a vantage point that provides the group with the best possible view of the decisive point.

c. In addition to the leader's reconnaissance, the unit may conduct additional reconnaissance operations. Examples include surveillance of an area by subordinate elements, patrols to determine where the enemy is (and is not) located, and establishment of observation posts to gain additional information. The commander may also incorporate the Javelin CLU as a surveillance tool (day or night), based on an analysis of the factors of METT-TC.

d. The nature of the reconnaissance, including what it covers and how long it lasts, depends on the tactical situation and the time available. The company commander should use the results of the COA development process to identify information and security requirements for the unit's reconnaissance operations.

2-13. COMPLETE THE PLAN

During this step, the company commander takes his selected (or refined) COA and expands it into a complete OPORD. He prepares overlays, refines the indirect fire list, completes CSS and C2 requirements and, of course, updates the tentative plan based on the latest reconnaissance or information. He prepares a briefing site and other briefing materials he may need to present the OPORD directly to his subordinates. Finally, he makes final coordination with other units or staff members before issuing the order to his subordinates. The five-paragraph OPORD format helps him paint a complete picture of all aspects of the operation: terrain, enemy, higher and adjacent friendly units, unit mission, execution, support, and command and control. The format also assists him in

addressing all relevant details of the operation. It provides subordinates with a smooth flow of information from beginning to end.

2-14. ISSUE THE OPORD

The OPORD precisely and concisely explains both his intent and concept of how he envisions the unit accomplishing the mission. The order does not contain unnecessary information. Nice-to-know information clouds what is essential and important and often causes confusion and uncertainty.

a. When issuing the OPORD, he must ensure his subordinates understand and share his vision of what must be done and when and how it must be done. They must understand how all the company's elements work together to accomplish the mission. They must also understand how the company's mission supports the intentions of the immediate higher commander. When he has finished issuing the order, subordinate leaders should leave with a clear understanding of what the company commander expects their elements to do.

b. Additionally, and in many respects more importantly, the company commander must issue the order in a manner that imbues his subordinates with confidence in the plan and a commitment to do their best to achieve the plan. Whenever possible, he must issue the order in person, looking into the eyes of his soldiers, to ensure each subordinate leader understands his mission and what his element must achieve.

c. Complete the order with an initial backbrief utilizing the initial warning order issued in step 2 of the TLP. Each subordinate leader should be able to backbrief the unit mission and intent, the immediate higher commander's intent, his own task and purpose, and the time he will issue his unit's OPORD.

2-15. SUPERVISE AND OR REFINE

This final step of the TLP is crucial. After issuing the OPORD, the company commander and his subordinate leaders must ensure that the required activities and tasks are completed in a timely manner prior to mission execution. Supervision is the primary responsibility of all leadership. It is imperative that both officers and NCOs check everything that is important for successful mission accomplishment. This includes but is not limited to--

- Listening to subordinate operation orders.
- Observing rehearsals of subordinate units.
- Checking load plans to ensure they are carrying only what is necessary for the mission.
- Checking the status and serviceability of weapons.
- Checking on maintenance activities of subordinate units.
- Ensuring local security is maintained.